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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,353	02/07/2002	James H. Buchanan	5022.20-1	4267

23559 7590 06/26/2006

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EXAMINER	
WILSON, ROBERT W	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/072,353	BUCHANAN ET AL.	
	Examiner	Art Unit	
	Robert W. Wilson	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15 and 17-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,17-22 and 28* is/are rejected.

7)☒ Claim(s) *23-27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10/21/02 & 3/26/02
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Objections

1. Claims 23-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cisco Document No.: 78-10548-02 henceforth refer to as Cisco which is an IDS document of record which according to the IDS was dated 2000.

Referring to claim 1, Cisco teaches: a method for provisioning IP VPNs which inherently are packet networks between Provider Edge Routers and Customer Edge Routers or plurality of sites per Pg 1-1.

Figures 3-18, 3-28, 3-29, 3-41, 3-46, & 3-47 are displays which are used to graphically define IP VPNS which are topological relationship between the Provider Edge Routers and Customer Edge Routers or plurality of sites.

The graphical software is used to define MP-BGP protocol, Route Filtering, MPLS forwarding packets, and VPN routing and forwarding instances associated with Provider Edge Routers and the Customer Edge Routers per Pg 1-5. These graphical assignments result in defining inherent

rules or constraints for the distribution of routes between the Providers Edge Routers and Customer Edge Routers.

Cisco does not expressly call for: automatic generation of the route distribution to the plurality of sites.

Cisco teaches: provisioning the Customer Edge Router (CES) and Provider Edge Routers (PES) resulting in VPNs being setup.

It would have been obvious to one of ordinary skill in the art at the time of the invention that software configuring individual PES and CES which result in an IP VPN would mean that the rules for route distribution would have had to be performed automatically in order for the invention to work.

In Addition Cisco teaches:

Regarding claim 2, the software is used to define graphically define a VPN Routing and Forwarding defines which routes are accepted by the PES from the CES or one import rule which results in automatically generating a configuration per Pg 1-7 to Pg 1-8.

Regarding claim 3, the software is used to define VPN Routing and Forwarding or route distribution rule which inherently discards inappropriate routes per Pg 1-5-Pg 1-8.

Regarding claim 4, the software is used to define VPNs between PES as well as Routing and Forwarding between PES which automatically defines route distribution between PES are backbone provider sites which are inherently meshed which results in automatically generating a configuration per Pg 1-5-Pg 1-8.

Regarding claim 5, the software is used to define VPN Routing and Forwarding associated with Customer edge Routers which are members in Hub and Spoke topology which results in

automatically generate import rules which results in automatically generating a configuration per Pg 1-1 to Pg 1-12.

Regarding claim 6, the software is used to define VPN Routing and Forwarding associated with Customer edge Routers which are hubs and members in Hub and Spoke topology which results in automatically generate import rules which results in automatically generating a configuration per Pg 1-1 to Pg 1-12.

Regarding claim 7, the software is used to define VPN routing and forwarding associated with customer edge routers which are spoke routers which results in automatically generating a local export rule which results in automatically generating a configuration per Pg 1-1 to Pg 1-12.

Regarding claim 8, the software is used to provision or configure a plurality of Provider Edge-Customer Router sites which are inherently meshed together in the backbone. The software configures the PE site to perform VPN Routing and Forwarding and MPLS and also configuring the PE routers with BGP per Pg 1-1 to Pg 1-12. This results in the Provider Edge Routers inherently accepting routes from other Provider Edge-Customer routers, associating route information with accepted VPN routes and advertising the accepted routes with the other Provider Edge Routers which are meshed in the backbone. This results in automatically generating a configuration.

Regarding claim 9, the software is used to provision or configure both Customer Edge Routers which are in a hub-spoke configuration. The software provisions or configures VPN Routing and Forwarding and MPLS as well as BGP protocol. This inherently results in Customer Edge Hub routers accepting VPN accepted routes from the Provider Edge-Customer Edge Routers.

The accepted routes are advertised to the spoke Customer Edge Routers per Pg 1-1 to Pg 1-12 respectively. This results in automatically generating a configuration.

Regarding claim 10, the software is used to provision or configure both Customer Edge Routers which are in a hub-spoke configuration. The software provisions or configures VPN Routing and Forwarding and MPLS as well as BGP protocol. This inherently results in Customer Edge Hub routers accepting VPN accepted routes from the Provider Edge-Customer Edge Routers. The accepted routes are advertised to the Hub-spoke Customer Edge Routers per Pg 1-1-to Pg 1-12 respectively. This results in automatically generating a configuration.

Regarding claim 11, the software is used to provision or configure both Customer Edge Routers which are in a hub-spoke configuration. The software provisions or configures VPN Routing and Forwarding and MPLS as well as MP-BGP protocol. This inherently results in Customer Edge Hub routers accepting VPN accepted routes from the Provider Edge-Customer Edge Routers which are associated with import and export routes or two sets of route information of said VPN to said accepted routes and advertising said accepted routes and said route information to members of the Hub and spoke. The accepted routes are advertised to the Hub-spoke Customer Edge Routers per Pg 1-1 to 1-12 respectively. This results in automatically generating a configuration.

Regarding claim 12, the software is used to provision or configure both Customer Edge Routers which are in a hub-spoke configuration. The software provisions or configures VPN Routing and Forwarding and MPLS as well as MP-BGP protocol. This inherently results in generating an export rule for a Customer Edge Spoke Router per Pg 1-1 to 1-12 respectively.

Regarding claim 13, the software is used to provision or configure both Customer Edge Routers which are in a hub-spoke configuration. The software provisions or configures VPN Routing and Forwarding and MPLS as well as MP-BGP protocol. This inherently results in: a customer edge router which is a member of a VPN with a PE router and in a separate VPN with a Customer Edge spoke router is configured to accepting import and export routes or two sets of routes from the per Pg 1-1 to 1-12 respectively. This results in automatically generating a configuration.

Regarding claim 14, the software is used to provision or configure both Customer Edge Routers which are in a hub-spoke configuration. The software provisions or configures VPN Routing and Forwarding and MPLS as well as MP-BGP protocol. This inherently results in: import and export information being stored in tables which the examiner has interpreted as a database per Pg 1-1 to 1-12 respectively. This results in automatically generating a configuration.

4. Claims 15, 17, 19-22, & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cisco Document No.: 78-10548-02 henceforth refer to as Cisco which is an IDS document of record which according to the IDS was dated 2000 in view of Arquie (U.S. Patent No.: 6,880,127)

Referring to claim 15, Cisco teaches: a method for provisioning IP VPNs which inherently are packet networks between Provider Edge Routers and Customer Edge Routers or plurality of sites and inherently constrains distribution of VPN routes within the network per Pg 1-1.

Figures 3-18, 3-28, 3-29, 3-41, 3-46, & 3-47 are displays which are used to graphically define IP VPNS which are topological relationship between the Provider Edge Routers and Customer Edge Routers or plurality of sites or graphically display area for VPN components.

Figure 3-28 shows a graphical display area for displaying and provisioning a plurality of Customer Edge Routers at customer sites and assigning MP-BGP protocol, Route Filtering, MPLS forwarding packets, and VPN routing and forwarding instances associated Customer Edge Routers per Pg 1-1 to 1-12. These graphical assignments result in defining inherent rules or constraints for the distribution of routes between the Providers Edge Routers and Customer Edge Routers.

Cisco does not expressly call for: automatic generation of the route distribution to the plurality of sites or drop and drag graphical user interface.

Cisco teaches: provisioning the Customer Edge Router (CES) and Provider Edge Routers (PES) resulting in VPNs being setup.

It would have been obvious to one of ordinary skill in the art at the time of the invention that software configuring individual PES and CES which result in an IP VPN would mean that the rules for route distribution would have had to be performed automatically in order for the invention to work.

Cisco does not expressly call for: drop and drag provisioning but teaches provisioning using a graphical display per Figures 3-18, 3-28, 3-29, 3-41, 3-46, & 3-47.

Arquie teaches display graphically displaying two nodes in which are components of a network per Figs 1A-1E and per col. 1 lines 27-col. 2 lines 29 and per Col.2 line 49-col 3 line 67. The display area or customer area shows two sites which upon dragging the cursor from one node to the other node and dropping defines a route between the two nodes which makes it a member of the network of VPN.

It would have been obvious to one of ordinary skill in the art the time of the invention to add the display unit of Arquie to the system of Cisco in order to assign nodes to the network in an efficient manner.

In Addition Cisco teaches:

Regarding claim 17, the software or means to configure the Provider Edge Routers and Customer Edge Routers with MP-BGP routing, route filtering, and VPN & Forwarding instace results in defining import and export route distribution for a plurality of sites per Pg 1-1 to Pg 1-12.

Regarding claim 18, each Provider Edge Router and Customer Edge Router has inherent software or means for processing MP-BGP route information from a plurality of sites in the VPN components.

Regarding claim 19, each Provider Edge Router and Customer Edge Router has inherent software or means for establishing MP-BGP route information from a plurality of sites in the VPN components which results in processing route information from a plurality of sites.

Regarding claim 20, each Provider Edge Router and Customer Edge Router has inherent tables or database for storing MP-BGP route information from a plurality of sites in the VPN components which results in processing route information from a plurality of sites according to export or import rules or route distribution rule.

Referring to claim 21, Cisco teaches: a method for provisioning IP VPNs which inherently are packet networks between Provider Edge Routers and Customer Edge Routers or plurality of sites and inherently constrains distribution of VPN routes within the network per Pg 1-1.

Figures 3-18, 3-28, 3-29, 3-41, 3-46, & 3-47 are displays which are used to graphically define IP VPNS which are topological relationship between the Provider Edge Routers and Customer Edge Routers or plurality of sites or graphically display area for VPN components.

Figure 3-28 shows a graphical display area for displaying and provisioning a plurality of Customer Edge Routers at customer sites and assigning MP-BGP protocol, Route Filtering, MPLS forwarding packets, and VPN routing and forwarding instances associated Customer Edge Routers per Pg 1-1 to 1-12 (graphically displaying)

These graphical assignments result in defining inherent rules or constraints for the distribution of routes between the Providers Edge Routers and Customer Edge Routers or enabling a site to be a VPN component.(enabling)

These graphical de-assignments result in removing inherent rules or constraints for the distribution of routes between the Providers Edge Routers and Customer Edge Routers or disabling a site from being a VPN component member (disabling)

These graphical assignments and de-assignments result in defining inherent rules or constraints for the distribution of routes between the Providers Edge Routers and Customer Edge Routers

Cisco does not expressly call for: automatic generation of the route distribution to the plurality of sites or drop and drag graphical user interface.

Cisco teaches: provisioning the Customer Edge Router (CES) and Provider Edge Routers (PES) resulting in VPNs being setup.

It would have been obvious to one of ordinary skill in the art at the time of the invention that software configuring individual PES and CES which result in an IP VPN would mean that the rules for route distribution would have had to be performed automatically in order for the invention to work.

Cisco does not expressly call for: drop and drag provisioning but teaches provisioning using a graphical display per Figures 3-18, 3-28, 3-29, 3-41, 3-46, & 3-47.

Arquie teaches display graphically displaying two nodes in which are components of a network per Figs 1A-1E and per col. 1 lines 27-col. 2 lines 29 and per Col.2 line 49-col 3 line 67. The display area or customer area shows two sites which upon dragging the cursor from one node to the other node and dropping defines a route between the two nodes which makes it a member of the network of VPN.

It would have been obvious to one of ordinary skill in the art the time of the invention to add the display unit of Arquie to the system of Cisco in order to assign nodes to the network in an efficient manner.

In Addition Cisco teaches:

Regarding claim 22, each Provider Edge Router and Customer Edge Router stores assignments for MP-BGP protocol, Route Filtering, MPLS forwarding packets, and VPN routing and forwarding instances which result in defining import and export rules stored in the routers. The routers also inherently receive and store MP-BGP routing information per Pgs 1-1to 1-12 respectively.

Regarding claim 28, MPLS or label switched paths are defined per Pgs 3-13-36 respectively.

Response to Amendment

5. Applicant's arguments with respect to claims 1-15 & 17-28 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571/272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert W. Wilson

Robert W Wilson
Examiner
Art Unit 2616

RWW
6/13/06

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